

Appl. No. 10/734,005
Response dated January 18, 2008
Reply to Office Action of October 18, 2007

Remarks

Claims 1-22 are pending in the application. Claims 1-11, 13, and 19-22 have been previously withdrawn.

Claim 12 is amended to further require the step of maintaining the superabsorbent material and the coating material in the flowing gas stream until the superabsorbent material is covered with at least a first layer of the coating material. Support for this amendment can be found throughout the specification including page 11, lines 14-16. No new matter has been added.

Pursuant to 37 C.F.R. § 1.111, reconsideration of the present application in view of the foregoing amendment and remarks and the following response is respectfully requested.

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Response to Rejections

Claims 12, 14 and 16-17 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 4,734,478 to Tsubakimoto et al. (hereinafter "Tsubakimoto"). This rejection is respectfully traversed as applied to the presently amended claims.

For anticipation under 35 U.S.C. § 102, a reference must teach every aspect of the claimed invention either explicitly or implicitly.

For obviousness under 35 U.S.C. §103, the Examiner has the burden to establish a *prima facie* case. In order to establish a *prima facie* case of obviousness, three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2143. The application of the "teaching, suggestion, or motivation" (TSM) test is not "rigid." However, the analysis supporting a rejection under 35 U.S.C. § 103(a) should be made explicit and should "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l. Co., v. Teleflex, Inc.*, 550 U.S. ____ (2007) (slip opinion at ¶¶ (3)(4) (emphasis added).

Applicants' claim 12 requires, *inter alia*, introducing at least one particle of at least one coating material into a flowing gas stream. The Examiner states that the method of Tsubakimoto comprises "coating a water-absorbing resin powder by spraying (claimed at least one particle of a coating material) a mixture of polyhydric alcohol...and...hydrophilic organic solvent with water...." Thus, it appears that the Examiner is identifying the polyhydric alcohol and/or the hydrophilic organic solvent with water as the "coating material" of Applicants' claims.

However, the polyhydric alcohol and/or the hydrophilic organic solvent with water of Tsubakimoto are not "particles" as required by the claim. The specification at page 3, lines 6-13 describes the term "particle" and is reproduced below.

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By "particle," "particles," "particulate," "particulates" and the like, it is meant that a material is generally in the form of discrete units. The particles can include granules, pulverulents, powders or spheres. Thus, the particles can have any desired shape such as, for example, cubic, rod-like, polyhedral, spherical or semi-spherical, rounded or semi-rounded, angular, irregular, etc. Shapes having a large greatest dimension/smallest dimension ratio, like needles, flakes and fibers, are also contemplated for use herein. The use of "particle" or "particulate" may also describe an agglomeration including more than one particle, particulate or the like.

Thus, the liquids cited by the Examiner are not "particles" as that term is used in the present application and the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Tsubakimoto teaches or suggests all the claim limitations. Accordingly, Applicants respectfully request that the Examiner withdraw this rejection. Claims 14, 16, and 17 depend from claim 12 and are patentably distinct for at least the same reason.

Claims 12 and 16 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,597,873 to Chambers et al. (hereinafter "Chambers"). This rejection is respectfully traversed as applied to the presently amended claims.

Applicants' claim 12 requires, *inter alia*, introducing at least one particle of at least one coating material into a flowing gas stream. The Examiner states that the method of Chambers comprises "uniformly distributing fine droplets of liquid crosslinker solution (claimed at least one particle of a coating material) ... on the surface of superabsorbent base polymer particles...." Thus, the Examiner has identified the liquid crosslinker solution as the "coating material" of Applicants' claims. However, the liquid crosslinker solution of Chambers is not a "particle" as required by the claim. As cited above, the specification describes the term "particle" and the liquid cited by the Examiner is not a "particle" as that term is used in the present application and the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Chambers teaches or suggests all the claim limitations. Accordingly, Applicants respectfully request that the Examiner withdraw this

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Claims 12 and 16 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,239,230 to Eckert et al. (hereinafter "Eckert"). This rejection is respectfully traversed as applied to the presently amended claims.

Applicants' claim 12 requires, *inter alia*, introducing at least one particle of at least one coating material into a flowing gas stream. The Examiner states that the HAA can be applied as a fine spray (claimed at least one particle of a coating material) onto the surface of freely tumbling SAP particles.... Thus, the Examiner has identified the liquid HAA solution as the "coating material" of Applicants' claims. However, the liquid HAA solution of Eckert is not a "particle" as required by the claim. As cited above, the specification describes the term "particle" and the liquid cited by the Examiner is not a "particle" as that term is used in the present application. Thus, the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Eckert teaches or suggests all the claim limitations. Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

Claims 12, 14 and 16 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,329,565 to Dutkiewicz et al. (hereinafter "Dutkiewicz") This rejection is respectfully traversed as applied to the presently amended claims.

Applicants' claim 12 requires, *inter alia*, applying an association agent and crosslinking reagent. The Examiner states that Dutkiewicz adds "polyacrylic acid solution ...and a crosslinking agent Kymene 557 LX...wherein the polyacrylic acid and Kymene spray nozzles were positioned to obtain a uniform coating ...on the cellulose fluff/superabsorbent." Thus, it appears that the Examiner is equating the polyacrylic acid solution of Dutkiewicz with the "association agent" of Applicants' claims. However, polyacrylic acid solution is not an association agent as that term is used in the present application. Specifically, Applicants' specification states at page 7, lines 16-26 that

The selection of a particular association agent can be made by one skilled in the art and will typically depend upon the chemical composition of the materials to be maintained in association with one another. Desirably, the association agent is suitable for use in applications involving human contact. Thus, the association agent should be non-toxic and non-irritating to

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humans. Several types of association agent are capable of being employed in the present invention. Illustrative association agents suitable for use in various versions of the present invention include, for example: water; volatile organic solvents such as alcohols; aqueous solutions of film-forming materials such as dried milk, lactose, soluble soy protein, and casein; synthetic adhesives such as polyvinyl alcohol; and mixtures thereof. The presence of water in the association agent is particularly effective in predisposing the superabsorbent material to wetting.

Based on this description, one skilled in the art would readily appreciate that polyacrylate acid solution is not an association agent as the term is used in the present Application. Thus, the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Dutkiewicz teaches or suggests all the claim limitations.

Furthermore, Applicants' currently amended claims require, *inter alia*, "maintaining the superabsorbent material and the coating material in the flowing gas stream until the superabsorbent material is covered with at least a first layer of the coating material." Dutkiewicz teaches that the superabsorbent and cellulose fluff are coated with polyacrylic acid solution and Kymene while being delivered at a velocity of about 150 ft/sec. The Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Dutkiewicz teaches or suggests that the superabsorbent material and cellulose are maintained in the gas stream until the superabsorbent material is covered with cellulose fluff or any other coating material.

Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

Claims 14-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Chambers and Eckert in view of U.S. Patent No. 6,376,011 to Reeves et al. (hereinafter "Reeves"). This rejection is respectfully traversed as applied to the presently amended claims.

As to claims 14, 15, and 18, the Examiner has not made a *prima facie* case of obviousness with regard to the combination of Chambers, Eckert, and Reeves. As discussed above, the liquids cited by the Examiner in Chambers and Eckert are not "particles" as that term is used in the present application and the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Chambers and/or Eckert teach or suggest all the claim limitations. The Examiner has not articulated how adding Reeves cures these

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defects because Reeves was added to satisfy a different element. Specifically, the Examiner adds Reeves to the cited prior art stating that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used heated air for suspending SAP particles in the cited prior art, as taught by Reeves et al." Thus, the Examiner has not made a *prima facie* case of obviousness with regard to the combination of Chambers, Eckert, and Reeves.

As to claims 16-17, the Examiner has not made a *prima facie* case of obviousness with regard to the combination of Chambers, Eckert, and Reeves. Based on the citations and language, it appears that the Examiner is actually referencing Tsubakimoto instead of Reeves. Thus, Applicants' response is based on that understanding. Applicants respectfully request clarification if this assumption is incorrect.

As discussed above, the liquids cited by the Examiner in Chambers and Eckert are not coating "particles" as that term is used in the present application and the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Chambers and/or Eckert teach or suggest all the claim limitations. The Examiner has not articulated how adding Tsubakimoto cures these defects. The Examiner adds Tsubakimoto to the cited prior art stating that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added water-soluble polymers such as carboxymethyl cellulose or hydroxyethyl cellulose to a coating material of the cited prior art with the expectation of providing the desired increased mechanical strength of the resulting granular product, as taught by Reeves et al." However, the Examiner has provided no support that the water-soluble polymers of Tsubakimoto are being added as "coatings." Instead, Tsubakimoto appears to teach that the water-soluble polymers are added to the water mixture and are integrated with the solution. To wit, Tsubakimoto states that "if the concentration of the water-soluble polymer is too high, the viscosity of the aqueous liquid becomes high and it becomes difficult to prepare and convey the aqueous liquid." (col. 6, lines 33-37, emphasis added).

Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

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Claims 15-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Tsubakimoto and Dutkiewicz in view of Reeves. This rejection is respectfully traversed as applied to the presently amended claims.

As to claims 15-18, the Examiner has not made a *prima facie* case of obviousness with regard to the combination of Tsubakimoto, Dutkiewicz, and Reeves. As discussed above, the liquids cited by the Examiner in Tsubakimoto are not "particles" as that term is used in the present application and the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Tsubakimoto teaches or suggests all the claim limitations.

Also, as discussed above, the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Dutkiewicz teaches or suggests an "association agent" or that the superabsorbent material and cellulose are maintained in the gas stream until the superabsorbent material is covered with cellulose fluff or any other coating material.

The Examiner has not articulated how adding Reeves cures these defects because Reeves was added to satisfy a different element. Specifically, the Examiner adds Reeves to the cited prior art stating that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used heated air for suspending SAP particles in the cited prior art, as taught by Reeves et al." Thus, the Examiner has not made a *prima facie* case of obviousness with regard to the combination of Tsubakimoto, Dutkiewicz, and Reeves.

As to claims 16-17, the Examiner has not made a *prima facie* case of obviousness with regard to the combination of Tsubakimoto, Dutkiewicz, and Reeves. As discussed above, based on the citations and language, it appears that the Examiner is actually referencing Tsubakimoto instead of Reeves. Thus, Applicants' response is based on that understanding. Applicants respectfully request clarification if this assumption is incorrect.

As discussed above, the liquids cited by the Examiner in Tsubakimoto are not "particles" as that term is used in the present application and the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Tsubakimoto teaches or suggests all the claim limitations.

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Also, as discussed above, the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Dutkiewicz teaches or suggests an "association agent" or that the superabsorbent material and cellulose are maintained in the gas stream until the superabsorbent material is covered with cellulose fluff or any other coating material.

Thus, the Examiner has not made a *prima facie* case of obviousness with regard to claim 16-17 based on Tsubakimoto and Dutkiewicz for the same reasons discussed above.

Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

Claims 12, and 14-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Tsubakimoto, Chambers, Eckert, Dutkiewicz in view of Reeves. This rejection is respectfully traversed as applied to the presently amended claims.

The Examiner has not made a *prima facie* case of obviousness with regard to the combination of Tsubakimoto, Chambers, Eckert, Dutkiewicz, and Reeves.

As discussed above, the liquids cited by the Examiner in Tsubakimoto, Chambers, and Eckert are not "particles" as that term is used in the present application and the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that these references teach or suggest all the claim limitations.

Also, as discussed above, the Examiner has not made a *prima facie* case of anticipation or obviousness by showing that Dutkiewicz teaches or suggests an "association agent" or that the superabsorbent material and cellulose are maintained in the gas stream until the superabsorbent material is covered with cellulose fluff or any other coating material.

The Examiner has not articulated how adding Reeves cures these defects because Reeves was added to satisfy a different element. Specifically, the Examiner adds Reeves to the cited prior art stating that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a fluidizing process of Reeves et al..." The Examiner has not explained how or why one skilled in the art would have combined these five different references. Furthermore, the Examiner has not provided any reasonable expectation of success. For example, Dutkiewicz appears to be a process used to make absorbent composites "on-line" utilizing superabsorbent materials whereas

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the remainder of the references appear to be processes for making or modifying the actual superabsorbent material. Finally, the Examiner has not shown what combination of the prior art would be necessary to teach or suggest all the claim limitations. Thus, the Examiner has not made a proper *prima facie* case of obviousness with regard to the combination of Tsubakimoto, Chambers, Eckert, Dutkiewicz, and Reeves.

Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

For the reasons stated above, it is respectfully submitted that all of the presently presented claims are in form for allowance.

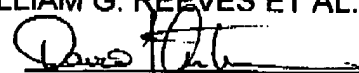
Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

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Respectfully submitted,

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